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## **AMENDMENTS**

## In the Claims

This listing of the claims replace all prior versions, and listings, of claims in the application. Amendments to the claims are shown by strikethrough for deleted matter or underlining for added matter.

Please cancel claim 22 without prejudice or disclaimer.

1 -11. (canceled).

- 12. (currently amended) Apparatus A system for treating a slurry stream-removing metal ions from wastewater, comprising:
- (a) a chemical mechanical polishing unit for chemical mechanical polishing integrated circuits, said chemical mechanical polishing unit having a chemical mechanical polishing unit having a source of a chemical mechanical polishing effluent discharge for discharging a wastewater feed containing byproduct polishing comprising the slurry stream containing copper ions at a level in the range of about 1-100 mg/l;
- (b) a carbon bed connected directly to said source of the chemical mechanical polishing effluent discharge, said carbon bed providing means for receiving said wastewater feed containing copper ions in solution, wherein said wastewater feed contains solids sized in the range of bout 0.01-1.0 μm in an amount higher than about 100 mg/1 comprising activated carbon; and
- (e) a chemical precipitation unit connected directly to said carbon bed for receiving a carbon bed product-stream from said carbon bed and for-removing said-copper ions from solution.
- 13. (currently amended) Apparatus for removing metal ions from wastewater The system as set forth in claim 12, wherein said wastewater feed slurry stream contains solids in an amount higher than about 500 mg/1.

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- 14. (currently amended) Apparatus for removing metal ions from wastewater The system as set forth in claim 12, wherein said wastewater feed contains slurry stream comprises hydrogen peroxide and said carbon bed product stream has concentration levels of hydrogen peroxide less than about 1 mg/1 (1 ppm).
  - 15. (canceled)
  - 16. (canceled)
- 17. (currently amended) Apparatus for removing metal ions from wastewater The system as set forth in claim 15 12, wherein said chemical precipitation unit operation comprises organic chemical means for contacting said earbon bed a product stream from said carbon bed comprising metal ions with an organic carbamate to precipitate said copper ions.
- 18. (currently amended) Apparatus for removing metal ions from wastewater The system as set forth in claim 15 12, wherein said chemical precipitation unit comprises organic chemical means for contacting said earbon bed a product stream from said carbon bed comprising copper ions with dithiocarbamate to precipitate said copper ions.
- 19. (currently amended) Apparatus for removing metal ions from wastewater The system as set forth in claim 1512, wherein said chemical precipitation unit comprises inorganic chemical means for contacting said carbon bed a product stream from said carbon bed comprising copper ions with iron sulfate (FeSO<sub>4</sub>) or aluminum sulfate (A1<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>) to eoprecipitate said copper ions.
  - 20. (canceled)
- 21. (currently amended) Apparatus A system for removing metal ions from wastewater a slurry stream, comprising:

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- (a)—a chemical mechanical polishing unit for chemical-mechanical polishing-integrated circuits, said-chemical mechanical polishing unit having a chemical mechanical polishing a chemical mechanical polishing effluent discharge for discharging a-wastewater the slurry stream containing hydrogen peroxide and solids sized in the range of about 0.01-1.0 μm in an amount higher than about 500 mg/l and a byproduct polishing slurry-containing copper ions at a level in the range of about 1-100 mg/l;
- (b) a carbon bed connected directly to said chemical mechanical polishing effluent discharge, said bed-providing means for receiving said wastewater stream containing said solids, hydrogen peroxide, and copper ions in solution said carbon bed comprising activated carbon; and
- (e) a chemical precipitation unit connected directly to said carbon bed for receiving a carbon bed product stream from said carbon bed and organic chemical means for contacting said carbon bed product stream metal ions with dithiocarbonate to precipitate said copper ions from removing said copper ions from solution.

## 22. (cancelled)

- 23. (new) The system of claim 21, further comprising a source of a precipitating solution comprising a dithiocarbonate compound fluidly connected to the chemical precipitation unit.
- 24. (new) The system of claim 21, further comprising a source of a precipitation solution comprising iron sulfate fluidly connected to the chemical precipitation unit.
- 25. (new) The system of claim 21, further comprising a source of a precipitation solution comprising aluminum sulfate fluidly connected to the chemical precipitation unit.